

"The use of semiochemical mass traps to reduce mirid damage in strawberry crops"

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Advances in the identification of attraction of mirids to semiochemicals has provided the opportunity to exploit synthetically produced sex pheromones and plant produced compounds for controlling pest species in crops. Sex pheromones of mirids are important for long range attraction of males to females and plant volatiles indicate egg laying sites for female mirids.

The European tarnished plant bug (*Lygus rugulipennis*) causes large yield losses (10->80%) in conventional and organic strawberry. Following the successful development of these semiochemicals in combination with effective traps we investigated the ability of a mass trapping system to reduce damage in strawberry crops in combination with another strawberry pest, strawberry blossom weevil (*Anthonomus rubi*).

Attractive traps and lures with host plant volatiles and sex or aggregation pheromones were deployed in strawberry crops at 50 per hectare in several European countries. Trap catches were monitored in relation to fruit damage and compared to untreated crops. Traps successfully captured both target pest species. In this paper we will present the results of the potential to reduce crop damage using mass traps and discuss the benefits and difficulties in using these techniques as part of integrated or organic pest management.